

United States Patent and Trademark Office

5~

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/040,833	01/08/2002	Pieter Van Dine	A34154	2661	
22930	22930 7590 03/02/2005			EXAMINER	
	IMON ARNOLD & WI	COMAS, YAHVEH			
	c/o IP DOCKETING DEPARTMENT 2941 FAIRVIEW PARK DR, SUITE 200			PAPER NUMBER	
FALLS CHUR	RCH, VA 22042-2924	2834			
			DATE MAILED: 03/02/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/040,833	VAN DINE ET AL.			
		Examiner	Art Unit			
		Yahveh Comas	2834			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	1) Responsive to communication(s) filed on 04 November 2004.					
2a) <u></u> ☐	This action is FINAL . 2b)⊠ This	action is non-final.				
3)[Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
5)□ 6)⊠ 7)□	4) ☐ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.					
Applicat	ion Papers					
9)[The specification is objected to by the Examine	er.				
10)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachmen		n □	OT (DTO 442)			
	ce of References Cited (PTO-892) the of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summ Paper No(s)/Ma	il Date			
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	5) Notice of Inform 6) Other:	al Patent Application (PTO-152)			

Art Unit: 2834

DETAILED ACTION

Response to Arguments

Applicant's arguments, see pages 2-6, filed 11/04/2004, with respect to rejection of claims 1-20 have been fully considered and are persuasive. The rejection of claims 1-20 has been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1, 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aleem et al. U.S. Patent No. 4,598,218 in view of Smith et al. 6,609,421.

Aleem discloses a rotor (10) supported for rotation within the stator having a preformed cylindrical can member (12) removably affixed to the rotor and at least one

sealing ring (42 and 44) for sealing the cylindrical can member to the member to which it is affixed. Aleem discloses the claimed invention except for the can member being a composite can member. However Smith disclose the use of a composite can member made of fiber reinforced polymer material for stator and rotor in order to avoid losses associated with metallic canning, assured corrosion and leak resistance and improved accuracy in positioning of the stator and rotor using a machined inner surface of the composite inner layer for the stator and/or a machined outer surface of the outer composite layer for the rotor.

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to provide a composite can member since that would had been desirable in order to avoid losses associated with metallic canning, and assure corrosion and leak resistance as disclosed by Smith.

2. Claims 1-3, 6 –9, 10-11, 15-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over T.L.R. Cooper U.S. Patent No. 1,678,380 in view of Smith et al. 6,609,421.

Cooper discloses a liquid environment, and an electric motor configured to operate in the liquid environment, wherein the electric motor further comprises a stator (2), a rotor supported for rotation within the stator (2), a preformed cylindrical plastic can member (10, 24, 25) removable affixed to one of the stator (2) and the rotor, and at least one sealing ring for sealing (19) the cylindrical can member to the member to which it is affixed. The can member is removable affixed by screws (see figures 1 and 3, page 2 - lines 15-27 and lines 80-90)

Application/Control Number: 10/040,833

Art Unit: 2834

Cooper discloses the claimed invention except for said can member being a composite can member. However Smith disclose the use of a composite can member made of fiber reinforced polymer material for stator and rotor in order to avoid losses associated with metallic canning, assured corrosion and leak resistance and improved accuracy in positioning of the stator and rotor using a machined inner surface of the composite inner layer for the stator and/or a machined outer surface of the outer composite layer for the rotor.

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to provide a composite can member since that would had been desirable in order to avoid losses associated with metallic canning, and assure corrosion and leak resistance as disclosed by Smith.

Referring to claims 8, no patentable weight has been given to the method of manufacturing limitations (i. e. dry lay-up resin transfer molding, wet and pre-impregnated, and filament winding techniques) since "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

3. Claims 3-4, 12-13 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over T.L.R. Cooper U.S. Patent No. 1,678,380 in view of Smith et al. 6,609,421 and in further view of Kanemitsu et al. JP Patent No 08159075 A.

Cooper in view of Smith discloses the claimed invention except for a surface between the rotor and the stator having ridges to control flow of liquid through the space. However Kanemitsu discloses a stator surface between the stator and the rotor having ridges (27) in order to increase the fluid resistance between the stator and the rotor.

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to provide a surface between the rotor and the stator having ridges to control the flow of liquid through the space since that would had been desirable in order to increase the fluid resistance between the stator and the rotor.

4. Claims 5, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aleem et al. U.S. Patent No. 4,598,218 in view of Smith et al. 6,609,421 and in further view of Kohihaas et al. U.S. Patent No. 6,454,547.

Aleem in view of Smith disclose the claimed invention except for a surface between the rotor and the stator having ridges to control flow of liquid through the space.

However, Kohihaas discloses a composite can member having a surface facing a space between the rotor (4) and the stator (3) in which ridges are formed to control flow of liquid through the space. The ridges extend at an angle to a plane perpendicular to

Art Unit: 2834

the axis of the motor circumferentially around the surface of the composite can member facing the space between the rotor (4) and the stator (3).

Therefore it would have been obvious to one having skill in the art at the time the invention was made to modified Aleem's inventions and provide a surface facing a space between the rotor and the stator with ridges since that would had been desirable to control flow of liquid through the space as disclosed by Kohihaas.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yahveh Comas whose telephone number is (571)272-2020. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DARREN SCHUBERG SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800 Page 6